

### ABSTRACT OF THE DISCLOSURE

An electrode is attached at a selective position to a patient's body to provide signals representative of the patient's parameters (e.g., electrocardiogram) at that position. The electrode signal may be in microvolts or millivolts. Depending upon the characteristics of the patient's skin, the electrode impedance may vary to approximately 200 kilohms. The electrode signals pass to an amplifier having an input impedance (e.g.,  $10^{15}$  ohms) approaching infinity and a low output impedance. The amplifier impedances insure that the electrode signal will pass through the amplifier without loss in signal strength and without change in signal characteristics. A low pass filter connected to the amplifier output eliminates noise and passes signals at low frequencies (e.g., 1 kilohertz). The filter and the amplifier are disposed on a printed circuit board with the amplifier physically and electrically isolated from the filter. Another low pass filter may be connected to the input of the amplifier.